DESIGN AND ANALYSIS QUALITY SYSTEM OF STUDENT INFORMATION PROCESSING DATA NEW STUDENT SMK MUHAMMADIYAH 3 YOGYAKARTA

By:

Reny Karlinawati

ABSTRACT

This research aims to design and analyze websites new Student Information System Acceptance SMK Muhammadiyah 3 Yogyakarta with PHP and MySQL that can manage data on the implementation of the prospective student Admission.

This research is Research and Development. This website development method using modified waterfall. Tests carried out to test the quality of the website System Information by Olsina (1998), namely correctness, functionality, reliability, efficiency, maintainability, and usability. Correctness quality obtained with white-box testing (testing Looping) and black box (Graph-based testing). The quality of the obtained functionality testing State Transition Testing. Reliability Testing Load testing obtained from 30 students to enter data, and editing data and deletion of data. Efficiency assessment obtained by recording the time it takes to open a page devoted. Maintainability obtained from Cross-browser testing. Obtained from Alpa Usability testing by a team of expert website and beta testing by admin, user1, and guest. Data analysis techniques used in this research is descriptive statistical analysis.

The results mennunjukkan that Admission Information System SMK Muhammadiyah 3 Yogyakarta can be developed and be able to perform data processing of new students of SMK Muhammadiyah 3 Yogyakarta. Assessment obtained information systems Admission SMK Muhammadiyah 3 Yogyakarta meet quality testing correctness Graph-Based and Looping testing. Admission Information Systems SMK Muhammadiyah 3 Yogyakarta assessed for each criterion usability. Assessment of quality functionality Admission Information Systems SMK Muhammadiyah 3 Yogyakarta run well on testing State transition testing. Response time performance testing conducted by Information Systems and response pages less than 2 seconds so that said system meets the quality efficiency by Shneiderman. Maintainability testing done with cross browser testing and obtained system is capable of running on Mozilla Firefox, Google Chrome, and Internet Explorer.

Keywords: Information Systems, correctness, Usability, Functionality, Reliability, Efficiency, Maintainability